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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,813	12/27/2004	Hiroyuki Hashimoto	1232-5570	5411

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EXAMINER

STRZELECKA, TERESA E

ART UNIT	PAPER NUMBER
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1637

NOTIFICATION DATE	DELIVERY MODE
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08/07/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com
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Office Action Summary	Application No. 10/519,813	Applicant(s) HASHIMOTO ET AL.	
	Examiner TERESA E. STRZELECKA	Art Unit 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,9,10,13,14,16-29,32,34,37,38,41,43 and 48-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,8,11,12,15,30,31,33,35,36,39,40,42 and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to an amendment filed May 2, 2008. Claims 1-56 were previously pending, with claims 4, 6, 9, 10, 13, 14, 16-29, 32, 34, 37, 38, 41, 43 and 48-56 withdrawn from consideration. Applicants amended claims 12, 39, 40, 42 and 44-47. Claims 1-3, 5, 7, 8, 11, 12, 15, 30, 31, 33, 35, 36, 39, 40, 42 and 44-47 will be examined.
2. Applicants' amendments overcame the rejections of claims 12, 39, 40, 42 and 44-47 under 35 U.S.C. 112, second paragraph and under 35 U.S.C. 101. All other previously presented rejections are maintained for reasons given below.

Response to Arguments

3. Applicant's arguments filed May 2, 2008 have been fully considered but they are not persuasive.

Regarding the rejection of claims 1-3, 5, 7, 8, 11, 12, 15, 30, 31, 33, 35, 36, 39, 40, 42 and 44-47 under 35 U.S.C. 103(a) over Okamoto et al. and Rava et al., Applicants argue the following:

A) Okamoto et al. do not teach a step of individually purifying the synthesized probes, and even if they did, they do not perform this step before dissolving probes in solution and depositing them onto a carrier.

B) Okamoto et al. do not disclose the step of obtaining probe information for each purified probe and a step of judging whether the probe synthesis and purification was good according to a predetermined criterion, and even if they did, they do not teach performing these steps until after the probes have been spotted onto aluminum plates and recovered.

C) Okamoto et al. do not teach repeating the steps for any probe that has been judged "not good" before spotting the probes onto a carrier, or dissolving the probes which have been judged "good" in a solution.

Let us look at the disclosure of Okamoto et al. The steps Applicants point to (deposition onto an aluminum plate and subsequent recovery was performed to determine optimum conditions for inkjet fabrication. Okamoto et al. teach fabrication of an oligonucleotide array with 64 different oligonucleotides (Fig. 4), therefore, 64 different sequences and 64 different spots. Okamoto et al. teach that all of the oligonucleotides were purchased from BEX in Tokyo. Therefore, since Okamoto et al. were able to create separate spots for 64 different oligonucleotides, the following had to happen before these oligonucleotides were spotted onto the carrier:

- 1) the oligonucleotides had to be individually synthesized,
- 2) the oligonucleotides had to be individually purified, i.e., each set of probes had to be purified separately from any other sets, otherwise the sequences would have gotten mixed up,
- 3) after the purification the oligonucleotides had to be judged as “good” or not based on the predetermined criteria, for example, the degree of purification.

All of these steps had to happen before the oligonucleotides were spotted onto the carrier. Further, it is only common sense that any set of probes which was judged as not fulfilling the criterion of being pure enough would have to be purified again. Therefore these inherent teachings of Okamoto et al. are supported by the specific teachings of Rave et al. regarding quality control of microarray fabrication and examination of each step of array manufacturing.

Therefore Okamoto et al. in combination with Rava et al. teach the methods of the instant claims.

The rejection is maintained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERESA E. STRZELECKA whose telephone number is (571)272-0789. The examiner can normally be reached on M-F (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teresa E Strzelecka
Primary Examiner
Art Unit 1637

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/Teresa E Strzelecka/

Primary Examiner, Art Unit 1637

August 1, 2008